

Goddard Space Flight Center 2009 Sample Student Projects

Required Academic Level

Junior/Senior Undergraduate, Graduate/Masters, Graduate/Doctorate Category

Computer & Info. Sci

Subcategory

Information Systems

Project Title

A Benchmark Image Database with Applications to Earth Science, Planetary Science & Exploration Systems/Data Processing position

Project Description

The focus of the project is to build an image database to be used by universities as benchmark data for image processing teaching and research. Before the summer, the overall database architecture and interface will be designed. This position will involve assisting the team in acquiring the necessary data, pre-processing them and populating the database.

Mentor's Expectation of Student

The mentor expects the intern to have the following skills: C, C++ or Java programming; image processing or Earth Science data Level-0 and 1 processing; database management. The intern is expected to work collaboratively with the team, to have good communication skills, and to attend a minimum of weekly meetings. A final report will be required, including a summary of the work done and detailed documentation of files, directories and programs developed by the intern.

Discipline of Project and/or Background Needed to successfuly complete the project

Databases; Image Processing

Skills

Listening/Note Taking, Oral/Presentation, Organization, Teamwork, Time Management, C, C++, Java, Image Processing, Software Testing